

IN THE CLAIMS:

The following listing of the claims identifies all of the claims presently in the application and shows the amendments made to claim 1 and claims 42 and 43 respectively. Claims 21, 22, 23, 25, 26, 32, and 38 have been cancelled.

LISTING OF CLAIMS

1. (Currently amended) A magnesium based alloy having high exhibiting a tensile yield strength (TYS) at ~~elevated temperatures of at least up to 175°C~~ of at least 150 MPa, and exhibiting minimum creep rate (MCR) less than 1.7×10^{-9} /s at 150°C under stress of 100 ~~Mpa~~ MPa consisting essentially of:

- i) at least 85.4 Wt% Mg,
- ii) 4.7 to 7.3 wt% aluminum,
- iii) 0.17 to 0.60 wt% manganese,
- iv) 0.0 to 0.8 wt% zinc,
- v) 1.8 to 3.2 wt% calcium,
- vi) 0.3 to 2.2 wt% tin,
- vii) 0.0 to 0.5 wt% strontium and

up to ~~0.0004~~ 0.004 wt% iron, up to 0.001 wt% nickel, up to 0.003 wt% copper, ~~and/or~~ and up to 0.03 wt% silicon.

2. - 20. (Canceled)

21 – 23 (Canceled)

24. (Previously Presented) An alloy according to claim 1, which contains 5.9 to 7.2 wt% aluminum, 0.9 to 2.1 wt% tin, 2.1 to 3.1 wt% calcium, and 0.2 to 0.35 wt% manganese.

25 - 28. (Canceled)

29. (Previously Presented) An alloy according to claim 1 exhibiting a marked response to aging at 250°C, wherein tensile yield strength, compressive yield strength, and creep resistance increase.

30. (Previously Presented) An alloy according to claim 1 which is beryllium free.

31 – 32. (Canceled).

33. (Previously Presented) An alloy according to claim 1, which exhibits minimum creep rate less than 4.9×10^{-9} /s at 200°C under stress of 55 Mpa.

34. (Previously Presented) An alloy according to claim 1, which exhibits improvements of its strength in course of temperature aging at 250°C for 1 hour.

35. (Previously Presented) An article which is a casting of a magnesium alloy of claim 1.

36. (Previously Presented) An article of claim 35, wherein the casting is chosen from the group consisting of high-pressure die-casting, sand casting, permanent mold casting, squeeze casting, semi-solid casting, thixocasting and thixomolding.

37 – 39 (Canceled).

40. (Previously Presented) An article according to claim 35 which was subjected to temperature aging at 250°C for 1 hour.

41. (Previously Presented) An alloy according to claim 1, comprising in its structure grains of Mg-Al solid solution or Mg-Al-Sn solid solution, and an intermetallic compound chosen from Al_2Ca , $\text{Al}_2(\text{Ca}, \text{Sr})$, Al_xMn_y , $\text{Al}_2(\text{Ca}, \text{Sn})$ and $\text{Al}_2(\text{Ca}, \text{Sn}, \text{Sr})$, wherein said intermetallic compounds are located at grain boundaries of said Mg-Al solid solution or Mg-Al-Sn solid solution.

42. (Currently Amended) An alloy according to claim 1 having tensile yield strength (TYS) of at least 140 Mpa at 200°C.

43. (Currently Amended) An alloy according to claim 1 having compressive yield strength (CYS) of at least 140 Mpa at 200°C.